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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/667,363

09/23/2003

Claudio Giorda

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10/19/2005

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EXAMINER

ADDISU, SARA

ART UNIT

PAPER NUMBER

3722

DATE MAILED: 10/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/667,363	Applicant(s) GIORDA, CLAUDIO	
	Examiner Sara Addisu	Art Unit 3722	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3/18/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1, 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Straub et al. (U.S. Patent No. 6,343,899), in view of Applicant Admitted Prior Art (AAPA).

Straub et al. teaches a horizontal boring machine for boring cylindrical surfaces having horizontal axis and axially spaced apart from each other, such as the seats for an engine crankshaft in the crankcase of an internal combustion engine ('899, figure 3). AAPA also confirms that Figure 1 of Straub et al.'s invention is a reproduction of Figure 2 of the Instant Application (Specification, page 1, lines 28-29, therefore Straub et al. teaches the structures claimed in claim 1 (i.e. the boring machine including a boring bar driven in rotation by a chuck and carrying at least one cutting bit, driving means for driving rotation of said chuck, means for axially moving the group composed of the chuck and the associated driving means, a counter-bar coupled in rotation head-to-head with said boring bar and driven in rotation by a respective auxiliary chuck, driving means for driving the rotation of the auxiliary chuck in synchronism with the rotation of the

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boring bar, means for axially moving the group composed of said counter-bar and the associated driving means, in synchronism with the axial movement of the boring bar, said boring bar being provided with a device for adjusting the radial position of said at least one cutting bit that is associated therewith) (AAPA, Page 1, line 28-page 3, line 19). Furthermore, Straub et al. teaches counter-bar (46) being provided with radially adjustable cutting bits at which point the coupling would be disposed approximately in the center similar to figure 1 and the counter-bar constitutes auxiliary boring bar ('899, Col. 10, lines 21-38 and Col. 3, lines 20-24).

2. Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Straub et al. (U.S. Patent No. 6,343,899), in view of Applicant Admitted Prior Art (AAPA) and further in view of Horn et al. (U.S. Patent No. 6,012,880).

Straub et al. teaches all the elements as set forth in the above rejection.

Regarding claim 4, Straub et al. teaches in figures 3-6, a second embodiment where the boring bar (28) is equipped with axially staggered cutting tools (30a-30e) accommodated in bending tool fixtures (elastically deformable blade) (68) for radial adjustment due to a radial pin (66) {note: regarding claim 4, although AAPA states that "... an arrangement with multiple cutting bits axially spaced apart from each other on the boring bar is unthinkable, as in this case it would be impossible in practice to make an automatic radial adjustment system for all of the cutting bits carried by the boring bar"

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(AAPA, Page 3, lines 20-28), as mentioned above Straub et al. teaches in figures 3-6, a second embodiment where the boring bar (28) is equipped with axially staggered cutting tools (30a-30e)}.

However, Straub et al. fails to teach the main boring bar and the counter-bar being provided with a pair of diametrically opposed cutting bits. Straub et al. also fails to teach the elastically deformable blade being moved outwardly due to the radial pin engaging against a conical portion of a shaft.

Horn et al. teaches a device for finish machining of bearing bores at crankcases having spindle boxes (1 & 2), a tool bit (11) carried by a resilient tool holder (8) and a diametrically opposed semi-finish tool (15). Horn et al. also teaches a cutting bit (11) being carried near the free end of a resilient tool holder (8) while the opposite end is fixed to the body of the boring bar via screws (9) ('880, figure 1). The resilient tool holder (elastically deformable blade) (8) is moved outwardly due to the radial pin engaging against a conical portion (7) of a shaft sliding inside an axial cavity of a bar.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Straub et al.'s invention such that it includes a diametrically opposed tool, as taught by Horn et al. for the purpose of performing a semi-finish machining ('880, Col. 2, lines 50-51). The modified device of Straub et al. would therefore have a semi-finish tool diametrically opposed to each tool bit (30a-30e), therefore the semi-finish tools would also be axially staggered as are tool bits (30a-30e, '899, figure 4). It would have also been obvious to one of ordinary skill in the art at the time of the invention was made to modify Straub et al.'s invention such that

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the radial movement of the elastically deformable tool holder is due to the radial pin engaging a conical portion of a shaft, as taught by Horn et al. for the purpose of ensuring that the tool holder and/or the tool will constantly take the desired position. ('880, Col. 1, lines 43-49).

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sara Addisu at (571) 272-6082. The examiner can normally be reached on 8:30 am - 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer Ashley can be reached on (571) 272-4502. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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SA
10/13/05


BOYER D. ASHLEY
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